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The  
National  
Aeronautics  
and  
Space  
Administration



*National Space Grant College and Fellowship Program*  
**NASA Cooperative Agreement Notice (CAN)**  
**Space Grant Innovative Pilot in STEM Education**

NASA Office of Education  
Announcement Number: NNH12CH0004C  
Catalog of Federal Domestic Assistance (CFDA) Number: 43.008  
Release Date: October 19, 2012  
Notice of Intent Due: November 26, 2012  
Proposals Due: December 14, 2012

***National Space Grant College and Fellowship Program***  
Innovative Pilot in STEM Education Solicitation

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## Summary of Key Information

### Solicitation Availability

This announcement is accessible through the NASA Solicitation and Proposal Integrated Review and Evaluation System (NSPIRES) <http://nspires.nasaprs.com/external/>. Click on Solicitations. The announcement is also available via the Space Grant website, found at <http://www.nasa.gov/offices/education/programs/national/spacegrant/home/index.html>.

### Notice of Intent (NOI)

Submission of a non-binding NOI to propose to this solicitation is encouraged. If submitting, the NOI must be submitted electronically to [hq-space-grant@mail.nasa.gov](mailto:hq-space-grant@mail.nasa.gov). Submitting an NOI is not required, and a Principal Investigator (PI) who submits an NOI is not required to submit a proposal. **In order to avoid any conflict of interest in assigning reviewers to proposals, please include list of participating/partnering institutions in your NOI.**

### Number and Size of Awards

It is anticipated that up to ten (10) awards of up to \$500,000 each to be expended over a 24-month period of performance may be made under this Notice pursuant to the authority of the *NASA Grant and Cooperative Agreement Handbook*: ([http://prod.nais.nasa.gov/pub/pub\\_library/grcover.htm](http://prod.nais.nasa.gov/pub/pub_library/grcover.htm)), Section 1260.12(d).

### Selecting Official

The selecting official for this solicitation is the Program Manager for the Aerospace Research and Career Development Program at NASA Headquarters.

### NASA Safety Policy

As stated in NASA Policy Directive (NPD) 8700.1, NASA Policy for Safety and Mission Success, the objectives of the NASA Safety Program are to protect the public from harm, ensure the safety of employees, and affect positively the overall success rate of missions and operations through preventing damage to high-value equipment and property.

### Proposal Submission

Within the Agency, NASA Research Announcements (NRAs) and Cooperative Agreement Notices (CANs) are the types of solicitations used to solicit proposals for grants and cooperative agreements. The main difference between an NRA and a CAN is that a CAN is used when the decision has been made in advance that cooperative agreements, rather than grants, will be awarded for a given research opportunity. The procedures and processes to be followed by proposers when responding to CANs and NRAs are the same.

## **Inquiries**

Questions about this solicitation may be directed to:

Dr. Carl Person  
Program Manager for Space Grant  
[carl.s.person@nasa.gov](mailto:carl.s.person@nasa.gov).

Questions regarding submission of proposals to this solicitation, may be directed to:

Aleksandra (Sasha) Korobov  
Project Coordinator, Space Grant Program  
[aleksandra.korobov@nasa.gov](mailto:aleksandra.korobov@nasa.gov)

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## **I. Introduction**

Commitment to science, technology, engineering, and mathematics (STEM) literacy and proficiency, and the development of the STEM workforce are reflected in President Obama's comprehensive efforts to improve STEM education. Congress passed and President Obama signed the America COMPETES Reauthorization Act of 2010, which calls for the formation of a National Science and Technology Council Committee on STEM Education (CoSTEM) to create a 5-year strategic plan to advance the state of American STEM education. The Committee released the following report in February 2012: [Coordinating Federal Science, Technology, Engineering, and Mathematics \(STEM\) Education Investments: Progress Report](#) (Co-STEM Report), which established a set of federal-wide objectives to increase the coordination of STEM education efforts; Objective 4 provides the following guidance to federal agencies:

- ***Strategic Federal Coordination Objective 4: Identify and focus on priority areas.*** Align a subset of the Federal STEM education investments to focus on Federal STEM education priority areas in a coordinated manner. The four priority areas identified are: Effective K-12 STEM teacher education, engagement, undergraduate STEM education, and serving groups traditionally underrepresented in STEM fields. (Pages viii and 13 of the Co-STEM Report))

This solicitation directly focuses on two of those priority areas:

- *Undergraduate STEM Education* – Improve retention rates, including among groups traditionally underrepresented, in STEM majors during the first two years of undergraduate education. (Page 17 of the Co-STEM Report)
- *Effective K-12 STEM Teacher Education* – Increase the number and proportion of individuals, particularly from groups that are traditionally underrepresented in STEM fields, who complete teacher pre-service and in-service programs with an ability to increase students' understanding of STEM. (Page 17 of the Co-STEM Report)

Additionally, this solicitation seeks to contribute to: *Serving Groups Traditionally Underrepresented in STEM Fields* – Increase the number of individuals from underrepresented groups that graduate with STEM degrees. (Page 17 of the Co-STEM Report)

The importance of these two priority areas can be found in the President's Council of Advisors on Science and Technology (PCAST) reports, *Engage to Excel: Producing one million additional college graduates with degrees in Science, Technology, Engineering, and Mathematics* (*Engage to Excel* report), and *Prepare and Inspire: K-12 Education in Science, Technology, Engineering, and Math for America's Future* (*Prepare and Inspire* report) (both cited in Section VI: Guidance/Citations of this announcement). While NASA cannot afford

to duplicate the efforts of other Federal agencies and partners, NASA can certainly utilize the expertise of the Space Grant consortia to contribute to the goals of the Administration.

Therefore, this solicitation seeks to address:

### **A. Increased Undergraduate Retention in STEM**

According to the *Engage to Excel* report, fewer than 40% of students who begin their undergraduate experience with the intent of majoring in a STEM field will complete a STEM degree. Reasons for this may include, but are not limited to: uninspiring introductory courses, difficulty with the mathematics requirements and/or content in STEM curricula, or even an unwelcoming atmosphere from faculty<sup>1</sup>. Among the undergraduate students most at risk for this attrition are first-year and sophomore students. A strong component of this report focuses on improving STEM education reach and retention during the first two years of college through supporting the development and identification of practices that increase the number of STEM graduates and further seeks to increase the quality of these learners' preparation.

### **B. Increased Number of Qualified STEM Educators**

One of the first steps in supporting the retention of students in STEM and producing STEM professionals lies with the educators involved in students' educational pursuits. To this end, among other recommendations in the *Prepare and Inspire* report, is a push to support over the next decade at least 100,000 new STEM middle and high school teachers who have strong grounding in STEM fields and strong content-specific pedagogical preparation so that they will achieve mastery of instruction skills and practices needed to confidently teach STEM topics.

## **II. Description of Opportunity**

This opportunity is open to all Space Grant institutions. Only two (2) proposals per consortium are permitted to be submitted. Any down-select of proposals must take place within the consortium, at the state level. Each proposal **MUST** focus on either a) increased undergraduate retention in STEM; **or** b) increased number of qualified STEM educators. In recruiting educators for engagement in this effort, a pre-service teacher shall be defined as an undergraduate student who has declared an education major but has not yet completed training and certification<sup>2</sup>. **Proposals that seek to serve both target areas will be deemed non-complaint and excluded from award consideration.** The NASA Space Grant program office anticipates selecting up to ten awardees total, with a **one-time** funding level of up to \$500,000 per total award. The period of performance for awarded

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<sup>1</sup> Report to the President, *Engage to Excel: Producing one million additional college graduates with degrees in Science, Technology, Engineering, and Mathematics*, President's Council of Advisors on Science and Technology, February 2012.

<sup>2</sup> NASA Education Recommendation Report (Education Design Team, 2011) page 49.

proposals is 24 months. Cohorts of student participants are expected to be selected for participation in concert with the academic calendar.

**A. Undergraduate Retention in STEM Focus:**

- Target First-Year and Sophomore STEM-interested students, or STEM majors (students most at-risk of STEM attrition)
- Project should implement innovative practices that address STEM attrition in undergraduate students and encourage persistence toward graduation in STEM majors
- Project may include: mentoring, hands-on activities, experiential learning opportunities, research engagement, challenges, competitions, and/or other academic and financial support
- Eligible participants are limited to:
  - o Rising first-year or sophomore undergraduate students
  - o U.S. Citizens
  - o Must be enrolled at an accredited college or university in the U.S. or U.S. Territory

**B. Qualified STEM Educator Focus:**

- Target Junior and Senior-level undergraduate students
- Project may include: mentoring, STEM content incorporation in classroom setting, research engagement, and/or other academic and financial support
- Recruited participants should be:
  - o Rising junior or senior undergraduate students
  - o U.S. Citizens
  - o Must be enrolled at an accredited college or university in the U.S. or U.S. Territory

Regardless of selected focus (undergraduate retention in STEM or qualified STEM educator), proposals for either opportunity should include:

- Investments of a significant level for each participant (i.e.  $\geq$  \$5,000 of direct financial support and/or  $\geq$  160 contact hours)
- Methodology to report intermediate results linked to skills, abilities, or attitude changes that enhance completion of STEM degrees or employment as STEM educators
- Direct participant progress reporting and tracking (consistent with academic calendars)
- Limiting target audience to undergraduate students
  - o Undergraduate Retention in STEM Focus: First-year and Sophomore-level students, especially those at risk of attrition.
  - o Qualified STEM Educator Focus: Junior and Senior-level pre-service students

- A target of at least 40% female participation and an underrepresented minority student participation target consistent with the STEM enrollment for the state<sup>3</sup>
- Program design based on proven educational methodologies and studies, and evidence-based practices
- Advancement of high-quality STEM education using NASA's unique capabilities (Mission, People, Facilities)
- Projects/activities that are not duplicative of other Federal investment, but contribute to Federal goals (*see Guidance/Citations Section VI. for references pertaining to existing federal initiatives*)
- Partners – Space Grant Affiliate or Non-Affiliate Partner Engagement

While cost sharing is not a requirement of this CAN, partnerships are required. These partners may be affiliate or non-affiliate members of the consortium. The success of this opportunity depends on the proposing organizations forming collaborative partnerships that are supportive of STEM education and contribution to the STEM workforce. To achieve proposed goals, proposing organizations are expected to solicit the involvement, participation, and/or contributions of education officials at the national, state, or local level, academia, industry, interested public/private partners, non-profit and for-profit entities, or organizations/associations with relevant experience and ability to accomplish the goals of the this opportunity. Partnerships may enable access to special purpose facilities, exposure to new work areas, the opportunity to reach new audiences, and leveraging activities for more efficient and effective operations. The proposal should demonstrate innovative and creative ways to promote activities and/or projects that could result in meaningful, long-term partnership(s) beyond the proposal period of performance. Proposers must demonstrate how the selected partners will contribute to successfully achieving proposed objectives. This may include a demonstrated record of past performance in achieving similar objectives.

Proposers are encouraged to seek opportunities to develop new relationships and/or sustain and strengthen existing institutional relationships with minority-serving institutions, internal or external to the consortium. The proposal should describe plans that will ensure “meaningful involvement” of these institutions and organizations through collaborations and partnerships.

Each proposal **MUST** focus on either a) increased undergraduate retention in STEM; **or** b) increased number of qualified STEM educators. **Proposals that seek to serve both target areas will be deemed non-complaint and excluded from award consideration.**

### C. Anticipated Measurable Results

NASA anticipates that this solicitation will result in the following:

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<sup>3</sup>The targets in place for recruiting and retaining underrepresented students into STEM fields of study and workforce is determined by NCES Minority Student enrollment data. The enrollment numbers reported for minority students, less the “Asian/Pacific Islander” category gives the baseline number for measure per state.



- Intermediate results linked to skills, abilities, or attitude changes that enhance completion of STEM degrees or employment as STEM educators.
- Replicable and scalable models pertaining to each respective focus.
- Publishable studies of evaluation and assessment, submitted to a scholarly journals that contribute to a body of knowledge of STEM retention or STEM educator employment. It is anticipated that this will be accomplished within 12 months of the end of the period of performance.

### **III. Award Administration Information**

#### **A. Notice of Award**

For selected proposals, a NASA Grants Officer will contact the business office of the proposer's institution. The NASA Grants Officer is the only official authorized to obligate the Government. For a grant or cooperative agreement, any costs that the proposer incurs in anticipation of an award will be subject to the *NASA Grant and Cooperative Agreement Handbook*, 14 Code of Federal Regulations (CFR) § 1260.125(e).

#### **B. Administrative and National Policy Requirements**

This solicitation does not invoke any special administrative or national policy requirements, nor do the resulting awards involve any special terms and conditions that differ from NASA's general terms and conditions as provided in the *Grant and Cooperative Agreement Handbook* and the *NASA Guidebook for Proposers*.

#### **C. Award Reporting Requirements**

The reporting requirements for awards made through this announcement will be consistent with the *Grant and Cooperative Agreement Handbook*, Exhibit G. Specific reporting requirements are described below.

Awardees will be expected to provide, consistent with academic calendars (using a NASA-provided template), information pertaining to proposed efforts and shall include:

- Progress toward meeting stated goals and objectives of the project(s)
- Achievements, results, and outcomes of the initiative as defined by the metrics and expected outcomes stated in the proposal
- Highlights that demonstrate intent of the cohort to continue to work toward STEM degree or employment in STEM academia.
- Participant information – number, level, and demographics of student and faculty participants, status/tracking of student participants

*Post-Award:* All direct participants will need to be longitudinally tracked in the Office of Education Performance Measurement System (OEPMS) after the conclusion of the award until such time that they make the "next step" in their STEM educational or career path. The "next step" generally involves employment and/or acceptance into an advanced degree program following graduation. Status of longitudinal tracking results will be reported annually.

If you have any questions about this solicitation, please contact the Program Manager for Space Grant, Dr. Carl Person, at [carl.s.person@nasa.gov](mailto:carl.s.person@nasa.gov).

#### **IV. Proposal Submission**

**A. Notice of Intent-** Proposers are encouraged to submit a non-binding Notice of Intent to propose. This is not required, but the information contained in a NOI is used to help expedite the proposal review activities and, therefore, is of considerable value to both NASA and the proposer. Please submit NOIs to the Space Grant mailbox at [hq-space-grant@mail.nasa.gov](mailto:hq-space-grant@mail.nasa.gov) nineteen (19) days prior to proposal due date (by **November 26, 2012**).

**B. Cover Page-** (not included in the page count): Include the name of Principal Investigator (PI) and the name of the submitting institution or organization, address, phone/fax numbers, email address and **original signature** of the PI from the submitting institution or organization (electronic signatures will not be accepted).

**C. Certifications-** Certifications: Each proposal must be accompanied by the following institutional certifications expressing compliance with federal regulations:

- a. Debarment, Suspension, and other Responsibility Matters;
- b. Assurance for Nondiscrimination Compliance;
- c. Certification Regarding Lobbying;
- d. Assurance of Compliance – China funding restriction;
- e. Representation by prospective recipient that they are not the Association of Community Organizations for Reform Now (ACORN) or a subsidiary of ACORN.

See Appendix B for additional information regarding certifications.

#### **D. Proposal Format**

- 1) Cover Page
- 2) Body of Proposal (maximum seven pages) including
  - i. Project Abstract
  - ii. Key Staff and Partners
  - iii. Project Description
  - iv. Management Plan
  - v. Project Goals and SMART Objectives
  - vi. Evaluation and Communication Plan including citation(s) of evidence-based approach for project

3) Timeline/Schedule (maximum one page)

4) Budget – Details and Narrative (maximum three pages)

##### **Notes on Budget:**

- i. Cost-sharing is not required
  - ii. Budget restrictions – no equipment
  - iii. Requested travel must include purpose, the number of trips and expected location, duration of each trip, airfare, and per diem.
  - iv. Direct labor costs should be separated by titles or disciplines (e.g., Principal Investigator, graduate research assistant, clerical support, etc.) with estimated hours, hourly rates, and total amounts of each.
  - v. Indirect costs should be sufficiently explained such that evaluators can understand the basis of the proposed costs.
  - vi. The proposed budget should reflect clear alignment with the content and text of the proposal.
  - vii. Dollar amounts proposed with no explanation (e.g., Equipment: \$12,000, or Labor: \$35,000) may reduce proposal acceptability. Each item should be explained in reasonable detail.
- 5) Principal Investigator Vita (maximum two pages)
  - 6) Certifications (see Appendix B)
  - 7) Consortium Director Endorsement (see Appendix C)

## **E. Submission Instructions**

General Format – No less than single-spaced, standard size (8 ½" x 11") paper, in no smaller than 12-point font with a minimum of 1" margins on all sides for each page. Use Times New Roman font. Illustrations, tables, charts, exhibits, etc., are restricted to no smaller than 10-point font. All pages must be numbered sequentially.

Electronic proposals and all required electronic documents must be submitted by close of business (5:00pm, Eastern Time) on **December 14, 2012**. A complete electronic submission will consist of:

- A single electronic (pdf) file which includes:
  - o Cover Page
  - o Proposal (maximum seven pages)
  - o Schedule/Timeline (maximum one page)
  - o Summary Budget
  - o Budget Details and Narrative (maximum three pages)
  - o Principal Investigator Vita (maximum two pages)
  - o Consortium Director Concurrence

Documents should be submitted using the following format:

Consortium\_Submitting Organization\_Focus\_2012

**Example:** MN\_Bemidji State University\_Educator\_2012

Electronic proposals and all required electronic documents must be submitted to the NASA Space Grant office at [hq-space-grant@mail.nasa.gov](mailto:hq-space-grant@mail.nasa.gov).

In addition to the electronic submission, hard copies of the proposal must be received by **Wednesday, December 19, 2012**. Regular U.S. Post Office mail addressed to NASA Headquarters is subjected to irradiation and significant delivery delays. Mail the original hard copy and one hard copy of the proposal via an express or commercial carrier or courier to:

Aleksandra Korobov  
Project Coordinator, Space Grant Program  
Mail Suite 6J37, Office of Education  
ATTN: Receiving and Inspection (Rear of Building)  
NASA Headquarters  
300 E Street, SW  
Washington, DC 20546-0001

Please contact Aleksandra (Sasha) Korobov at [aleksandra.korobov@nasa.gov](mailto:aleksandra.korobov@nasa.gov) if you have any questions about your proposal submission.

## **V. Proposal Review and Evaluation Criteria**

Proposals will be reviewed and evaluated by qualified STEM professionals at NASA. The following criteria will be used in the evaluation process:

### **A. Merit (40%)**

- *Overall Merit:* Merit of the proposal including feasibility to achieve the proposed project(s); support of the purpose, intent and scope, and anticipated results of the announcement; innovative strategy, predicated on proven educational methodologies and evidence-based practices that will result in an increased retention of STEM undergraduate students and an increase in the number of qualified STEM educators.
- *Partnerships/Sustainability:* Clearly demonstrates innovative and creative ways to promote activities and/or projects that will result in meaningful, long-term partnership(s) beyond the proposal period of performance. How the selected partners will contribute to successfully achieving proposed objectives is clearly articulated.
- *Project Management:* Plan and structure for efficient operation of the project(s). Involves a sound approach that can serve as a model for other similar projects.

### **B. Evaluation and Communication (20%)**

- Sound methodology and approach to collect and report intermediate results linked to skills, abilities, or attitude changes that will enhance retention outcomes or employment.
- Appropriate and feasible plan(s) for publication of results and dissemination of best-practices to the larger STEM education community of practice

### **C. Contribution to Agency Operating Principles (20%)**

- *Content:* Project(s) is directly tied to or makes direct use of NASA data, information, research content, scientific or technical activities, people, or facilities.
- *Diversity:* Project(s) make a demonstrable contribution to attracting diverse students, including underrepresented minorities, women and/or persons with disabilities to NASA-related careers in science, technology, engineering, or mathematics. If applicable, the proposal describes plans for seeking opportunities to develop new relationships and/or sustain and strengthen existing institutional relationships with minority-serving institutions, internal or external to the consortium. If applicable, the proposal describes plans that demonstrate “meaningful involvement” of these institutions and organizations through collaborations and partnerships.
- *Relevance:* Project(s) responds to the need identified in this announcement and is based on a compelling mutual need for the consortium and NASA; potential to make an effective content contribution to the realization of the purpose of the solicitation.

### **D. Budget – Details and Narrative (20%):**

- Adequate, appropriate, reasonable, and realistic budget that includes demonstration of effective use of funds; the proposed project(s) outcomes should justify the total project costs; and evidence that the scale of the proposed activity is commensurate with project funding.
- The budget narrative clarifies the inclusion of any listed expenses; and a direct connection between the expenditure and achieving project outcomes should be clear to the proposal reviewer. Innovative approaches and solutions to leveraging NASA funding that ensure that the greatest percentage of funds are applied and used to achieve the direct goals and objectives of the project (as opposed to those funds that are used to support the traditional indirect costs (e.g. Facilities & Administration or F&A) of the individual institutions; or those indirect costs that have little or no direct, positive impacts on the educational experience of the participants or the successful outcome of the program) will be evaluated. The proposer shall describe, in detail, any proposed cost sharing arrangements and/or any voluntary waiving of indirect costs that it and its partner institutions propose. In accordance with 14 CFR 1260.10(b)(1)(iii), the amount of cost sharing will not be a factor in determining whether to select a proposal for award.

## **VI. Guidance/Citations**

- Report to Congress, *Coordinating Federal Science, Technology, Engineering, and Mathematics (STEM) Education Investments, Progress Report*, National Science and Technology Council, February 2012.  
[http://www.whitehouse.gov/sites/default/files/microsites/ostp/nstc\\_federal\\_stem\\_education\\_coordination\\_report.pdf](http://www.whitehouse.gov/sites/default/files/microsites/ostp/nstc_federal_stem_education_coordination_report.pdf)

- Report to the President, *Engage to Excel: Producing one million additional college graduates with degrees in Science, Technology, Engineering, and Mathematics*, President's Council of Advisors on Science and Technology, February 2012.  
<http://www.whitehouse.gov/sites/default/files/microsites/ostp/pcast-engage-to-excel-final-feb.pdf>
- Report to the President, *Prepare and Inspire: K-12 Education in Science, Technology, Engineering, and Math for America's Future*, President's Council of Advisors on Science and Technology, September 2010.  
<http://www.whitehouse.gov/sites/default/files/microsites/ostp/pcast-stemed-report.pdf>
- National Center for Education Statistics – please use the link below to determine the consortium target for minority enrollment, minus the Asian/Pacific Islander population.  
[http://nces.ed.gov/programs/digest/d10/tables/dt10\\_238.asp](http://nces.ed.gov/programs/digest/d10/tables/dt10_238.asp)
- *Science and Engineering Indicators 2012*, National Science Board, Arlington, VA (NSB 12-01) | January 2012 <http://www.nsf.gov/statistics/seind12/>
- NASA Guidebook for Proposers (January 2012 Edition).  
<http://www.hq.nasa.gov/office/procurement/nraguidebook/proposer2012.pdf>
- NASA Grant and Cooperative Agreement Handbook.  
[http://prod.nais.nasa.gov/pub/pub\\_library/grcover.htm](http://prod.nais.nasa.gov/pub/pub_library/grcover.htm)
- NASA Education Recommendation Report (Education Design Team) – 2011  
[http://www.nasa.gov/pdf/536766main\\_Education-Recommendation-Report\\_Final.pdf](http://www.nasa.gov/pdf/536766main_Education-Recommendation-Report_Final.pdf)

## VII. Appendices

### APPENDIX A: NASA POINTS OF CONTACT

#### NASA Education Contacts

Discussions of potential collaborations with NASA Education personnel may be directed to the appropriate contact in the following listing:

#### NASA Mission Directorate and Chief Technologist Contacts

<u>Aeronautics Research Mission Directorate</u> Tony Springer Education Liaison NASA Headquarters Phone: (202) 358-0848 <a href="mailto:Tony.Springer@nasa.gov">Tony.Springer@nasa.gov</a>	<u>Science Mission Directorate</u> Stephanie Stockman Education/Public Outreach Lead NASA Headquarters Phone: (202) 358-0039 <a href="mailto:Stephanie.A.Stockman@nasa.gov">Stephanie.A.Stockman@nasa.gov</a>
<u>Human Exploration and Operations Mission Directorate</u> Alotta Taylor Director, Mission Support and Communications NASA Headquarters Phone: (202) 358-2534 <a href="mailto:Alotta.E.Taylor@nasa.gov">Alotta.E.Taylor@nasa.gov</a>	<u>Office of the Chief Technologist</u> Stacey Brooks Public Outreach Manager NASA Headquarters Phone: (202) 358-1890 <a href="mailto:stacey.brooks@nasa.gov">stacey.brooks@nasa.gov</a>

## NASA Center Contacts

<p><u>Ames Research Center</u>          Maria Lopez          AERO Institute          Phone: (650) 604-0896  <a href="mailto:Maria.C.Lopez@nasa.gov">Maria.C.Lopez@nasa.gov</a></p>	<p><u>Kennedy Space Center</u>          Benita Desuza          Lead Education Project Specialist          Phone: (321) 867-3671  <a href="mailto:Benita.W.Desuza@nasa.gov">Benita.W.Desuza@nasa.gov</a></p>
<p><u>Dryden Flight Research Center</u>          Lance Richards          Education Lead          Phone: (661) 276-3562  <a href="mailto:Lance.Richards-1@nasa.gov">Lance.Richards-1@nasa.gov</a></p>	<p><u>Langley Research Center</u>          Thomas Pinelli          University Affairs Officer          Phone: (757) 864-2491  <a href="mailto:Thomas.E.Pinelli@nasa.gov">Thomas.E.Pinelli@nasa.gov</a></p>
<p><u>Goddard Space Flight Center</u>          Lucy McFadden          Chief of University Affairs          Phone: (301) 614-6941  <a href="mailto:Lucyann.A.McFadden@nasa.gov">Lucyann.A.McFadden@nasa.gov</a></p>	<p><u>Glenn Research Center</u>          David Kankam          University Affairs Officer          Phone: (216) 433-6143  <a href="mailto:Mark.D.Kankam@nasa.gov">Mark.D.Kankam@nasa.gov</a></p>
<p><u>Jet Propulsion Laboratory</u>          Linda Rodgers          University Programs Administrator          Phone: (818) 354-3274  <a href="mailto:Linda.Rodgers@jpl.nasa.gov">Linda.Rodgers@jpl.nasa.gov</a></p>	<p><u>Marshall Space Flight Center</u>          Frank Six          University Affairs Officer          Office of Academic Affairs (HS30)          Phone: (256) 961-0678  <a href="mailto:Norman.F.Six@nasa.gov">Norman.F.Six@nasa.gov</a></p>
<p><u>Johnson Space Center</u>          Frank Prochaska          Education Program Specialist          Phone: (281) 483-1999  <a href="mailto:Frank.E.Prochaska@nasa.gov">Frank.E.Prochaska@nasa.gov</a></p>	<p><u>Stennis Space Center</u>          Nathan Sovik          University Affairs Officer          Phone: (228) 688-7355  <a href="mailto:Nathan.A.Sovik@nasa.gov">Nathan.A.Sovik@nasa.gov</a></p>



## **APPENDIX B: CERTIFICATION OF COMPLIANCE**

By submitting the enclosed certification form in response to this announcement, the authorizing official provides assurance that the jurisdiction is in compliance with the certifications listed. The summaries for the existing certifications state:

### **1) A. Debarment, Suspension, and Other Responsibility Matters Primary Covered Transactions**

This certification is required by the regulations implementing Executive Order 12549, Debarment and Suspension, 34 CFR Part 85, Section 85.510, Participant's responsibilities. The regulations were published as Part VII of the May 26, 1988 Federal Register (pages 19160 - 19211). Copies of the regulation may be obtained by contacting the U.S. Department of Education, Grants and Contracts Service, 400 Maryland Avenue, S.W. (Room 3633 GSA Regional Office Building No. 3), Washington, DC. 20202-4725, telephone (202) 732-2505.

- a. The prospective primary participant certifies to the best of its knowledge and belief, that it and its principals:
  - i. Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;
  - ii. Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State, or Local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
  - iii. Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State, or Local) with commission of any of the offenses enumerated in paragraph (1)(b) of this certification; and
  - iv. Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State, or Local) terminated for cause or default.
- b. Where the prospective primary participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

### **B. Certification Regarding Lobbying for Contracts, Grants, Loans, and Cooperative Agreements**

The undersigned certifies, to the best of his or her knowledge and belief, that:

- c. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
- d. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form - LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.
- e. The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, sub-grants, and contracts under grants, loans, and cooperative agreements) and that all sub-recipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, U.S. Code. Any person who fails to file the required certificate shall be subject to a civil penalty of not less than \$10,000, and not more than \$100,000 for each such failure.

The summaries for the additional certifications are given in the following three sections and the certification form is in section E.4. This certification form must be completed and returned as part of the jurisdiction's proposals.

### **C. Assurance of Compliance with the National Aeronautics and Space Administration Regulations Pursuant to Nondiscrimination in Federally Assisted Programs**

As a condition of receipt of Federal financial assistance, the Applicant Institution, acknowledges and agrees that it must comply (and require any subgrantees, contractors, successors, transferees, and assignees to comply) with applicable provisions of national laws and policies prohibiting discrimination, including but not limited to:

Title VI of the Civil Rights Act of 1964, as amended, which prohibits recipients of federal financial assistance from discriminating on the basis of race, color, or national origin (42 U.S.C. 2000d et seq.), as implemented by NASA Title VI regulations, 14 C.F.R. Part 1250.

As clarified by Executive Order 13166, Improving Access to Services for Persons with Limited English Proficiency, and resulting agency guidance, national origin discrimination includes discrimination on the basis of limited English proficiency (LEP). To ensure compliance with Title VI, the Applicant must take reasonable steps to ensure that LEP persons have meaningful access to its programs in accordance with NASA Title VI LEP Guidance to Grant Recipients (68 Fed. Reg. 70039). Meaningful access may entail providing language assistance services, including oral and written translation, where necessary. The Applicant is encouraged to consider the need for language services for LEP persons served or encountered both in developing budgets and in conducting programs and activities. Assistance and information regarding LEP obligations may be found at <http://www.lep.gov>.

Title IX of the Education Amendments of 1972, as amended, which prohibits discrimination on the basis of sex in education programs or activities (20 U.S.C. 1681 et seq.) as implemented by NASA Title IX regulations, 14 C.F.R. Part 1253. If the Applicant is an educational institution:

- f. The Applicant is required to designate at least one employee to serve as its Title IX coordinator (14 C.F.R. §1253.135(a)).
- g. The Applicant is required to notify all of its program beneficiaries of the name, office, address, and telephone number of the employee(s) designated to serve as the Title IX coordinators. (14 C.F.R. §1253.135(a)).
- h. The Applicant is required to publish internal grievance procedures to promptly and equitably resolve complaints alleging illegal discrimination in its programs or activities (14 C.F.R. §1253.135(b)).
- i. The Applicant is required to take specific steps to regularly and consistently notify program beneficiaries that the Applicant does not discriminate in the operation of its programs and activities. (14 C.F.R. §1253.140).

Section 504 of the Rehabilitation Act of 1973, as amended, which prohibits The Applicant from discriminating on the basis of disability (29 U.S.C. 794) as implemented by NASA Section 504 regulations, 14 C.F.R. Part 1251.

The Applicant is required to designate at least one employee to serve as its Section 504 coordinator (14 C.F.R. §1251.106(a)).

The Applicant is required to notify all its program beneficiaries of the name, office, address, and telephone number of the employee(s) designated to serve as the Section 504 coordinator (14 C.F.R. §1251.106(a)).

The Applicant is required to publish internal grievance procedures to promptly and equitably resolve complaints alleging illegal discrimination in its programs or activities (14 C.F.R. §1251.106(b)).

The Applicant is required to take specific steps to regularly and consistently notify program beneficiaries that the Applicant do not discriminate in the operation of its programs and activities. (14 C.F.R. §1251.107).

The Age Discrimination Act of 1975, as amended, which prohibits the Applicant from discriminating on the basis of age (42 U.S.C. 6101 et seq.) as implemented by NASA Age Discrimination Act regulations, 14 C.F.R. Part 1252.

The Applicant also acknowledges and agrees that it must cooperate with any compliance review or complaint investigation conducted by NASA and comply (and require any subgrantees, contractors, successors, transferees, and assignees to comply) with applicable provisions governing NASA access to records, accounts, documents, information, facilities, and staff. The Applicant must keep such records and submit to the responsible NASA official or designee timely, complete, and accurate compliance reports at such times, and in such form and containing such information, as the responsible NASA official or his designee may determine to be necessary to ascertain whether the Applicant has complied or is complying with relevant obligations and must immediately take any measure determined necessary to effectuate this agreement. The Applicant must comply with all other reporting, data collection, and evaluation requirements, as prescribed by law or detailed in program guidance.

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### Certification of Compliance

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Title: \_\_\_\_\_  
Principal Investigator: \_\_\_\_\_  
Institution: \_\_\_\_\_  
Street/PO Box: \_\_\_\_\_  
City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_ Country: \_\_\_\_\_  
Email: \_\_\_\_\_  
Phone: \_\_\_\_\_ Fax: \_\_\_\_\_

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### Certification of Compliance with Applicable Executive Orders and U.S. Code

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By submitting the proposal identified in the Cover Sheet/Proposal Summary either in response to a NASA Research Announcement or as an Unsolicited Proposal, the Authorizing Official of the proposing institution (or the individual proposer if there is no proposing institution) as identified below:

- Certifies that the statements made in this proposal are true and complete to the best of his/her knowledge;
- Agrees to accept the obligations to comply with NASA award terms and conditions if an award is made as a result of this proposal; and
- Confirms compliance with all provisions, rules and stipulations set forth by these Certifications [namely,
  - A. *Debarment & Suspension.*
  - B. *Certifications, Disclosures, and Assurances Regarding Lobbying*
  - C. *Certification of Compliance with the NASA Regulations Pursuant to Nondiscrimination in Federally Assisted Programs*

Willful provision of false information in this proposal and/or its supporting documents, or in reports required under an ensuing award, is a criminal offense (U.S. Code, Title 18, Section 1001).

Title of Authorizing Official: \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Name of Proposing Institution: \_\_\_\_\_

Phone: \_\_\_\_\_ Fax: \_\_\_\_\_ E-mail: \_\_\_\_\_

Cage Code: \_\_\_\_\_ DUNS Number: \_\_\_\_\_ TIN Number: \_\_\_\_\_

**2. REPRESENTATION BY PROSPECTIVE RECIPIENT THAT THEY ARE NOT THE ASSOCIATION of COMMUNITY ORGANIZATIONS for REFORM NOW (ACORN) or a SUBSIDIARY of ACORN**

- (a) In accordance with section 534 of the Consolidated and Further Continuing Appropriations Act of 2012 (Pub. L.112-55), none of the funds made available by the Act may be distributed to the Association of Community Organizations for Reform Now (ACORN) or its subsidiaries.
- (b) The prospective recipient represents, by submission of its offer, that it is not the Association of Community Organizations for Reform Now (ACORN) or a subsidiary thereof, and that no funds made available under this award will be distributed to ACORN or its subsidiaries.

**REPRESENTATION BY CORPORATIONS REGARDING AN UNPAID DELINQUENT TAX LIABILITY OR A FELONY CONVICTION UNDER ANY FEDERAL LAW**

- (a) In accordance with sections 544 and 543 of the Consolidated and Further Continuing Appropriations Act of 2012 (Pub. L.112-55), none of the funds made available by that Act may be used to enter into a grant or cooperative agreement with any corporation that -
  - (1) Has any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability, where the awarding agency is aware of the unpaid tax liability, unless an agency has considered suspension or debarment of the corporation and made a determination that this action is not necessary to protect the interests of the Government; or
  - (2) Was convicted (or had an officer or agent of such corporation acting on behalf of the corporation convicted) of a felony criminal violation under any Federal law within the preceding 24 months, where the awarding agency is aware of the conviction, unless an agency has considered suspension or debarment of the corporation and made a determination that this action is not necessary to protect the interests of the Government.
- (b) The prospective recipient represents that -
  - (1) It is ☐ is not ☐ a corporation that has had any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability; and

(2) It is ☐ is not ☐ a corporation that was convicted, or had an officer or agent acting on behalf of the corporation convicted, of a felony criminal violation under a Federal law within the preceding 24 months.

**CERTIFICATION BY PROSPECTIVE RECIPIENTS REGARDING FEDERAL INCOME TAX FILING and FEDERAL INCOME TAX VIOLATIONS**

(a) In accordance with section 527 of the Consolidated and Further Continuing Appropriations Act of 2012 (Pub. L.112-55), none of the funds made available by the Act may be used to enter into a grant or cooperative agreement in an amount greater than \$5 Million unless the prospective recipient certifies in writing to NASA that, to the best of its knowledge and belief, the prospective recipient has filed all Federal tax returns required during the three years preceding the certification, has not been convicted of a criminal offense under the Internal revenue Code of 1986, and has not, more than 90 days prior to certification, been notified of any unpaid Federal tax assessment for which the liability remains unsatisfied, unless the assessment is the subject of an installment agreement or offer in compromise that has been approved by the Internal Revenue Service and is not in default, or the assessment is the subject of a non-frivolous administrative or judicial proceeding.

(b) The prospective recipient's proposal shall include a signed written certification as follows -

To the best of my knowledge and belief, ---(name of offeror)--- has filed the Federal tax returns required during the three years preceding this certification, has not been convicted of a criminal offense under the Internal revenue Code of 1986, and has not, more than 90 days prior to certification, been notified of any unpaid Federal tax assessment for which the liability remains unsatisfied, unless the assessment is the subject of an installment agreement or offer in compromise that has been approved by the Internal Revenue Service and is not in default, or the assessment is the subject of a non-frivolous administrative or judicial proceeding.

Recipient \_\_\_\_\_

Signature \_\_\_\_\_

Name \_\_\_\_\_

Title \_\_\_\_\_

Date of execution \_\_\_\_\_

### **3. Assurance**

Institution Name:

Proposal Title:

Grant Number:

#### **Assurance of Compliance – China Funding Restriction (DEVIATION FEB 2012)**

(iv) An Assurance of Compliance with The Department of Defense and Full-Year Appropriation Act, Public Law 112-10 Section 1340(a); The Consolidated and Further Continuing Appropriation Act of 2012, Public Law 112-55, Section 539; and future-year appropriations herein after referred to as “the Acts”, whereas:

(1) NASA is restricted from using funds appropriated in the Acts to enter into or fund any grant or cooperative agreement of any kind to participate, collaborate, or coordinate bilaterally with China or any Chinese-owned company, at the prime recipient level and at all subrecipient levels, whether the bilateral involvement is funded or performed under a no-exchange of funds arrangement.

(2) Definition: “China or Chinese-owned Company” means the People’s Republic of China, any company owned by the People’s Republic of China, or any company incorporated under the laws of the People’s Republic of China.

(3) The restrictions in the Acts do not apply to commercial items of supply needed to perform a grant or cooperative agreement.

(4) By submission of its proposal, the proposer represents that the proposer is not China or a Chinese-owned company, and that the proposer will not participate, collaborate, or coordinate bilaterally with China or any Chinese-owned company, at the prime recipient level or at any subrecipient level, whether the bilateral involvement is funded or performed under a no-exchange of funds arrangement.

Title of Authorizing Official: \_\_\_\_\_

Printed Name: \_\_\_\_\_ Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Name of Proposing Institution: \_\_\_\_\_

Phone: \_\_\_\_\_ Fax: \_\_\_\_\_

E-mail: \_\_\_\_\_



## APPENDIX C: CONSORTIUM DIRECTOR ENDORSEMENT

The Space Grant Consortium Director has reviewed and agrees with the contents of the proposal. This signature indicates the endorsement by the Director acknowledging this proposal as one of the two possible submissions from the consortium for this specific solicitation.

*Director: Please affirm concurrence through signature on the line below. An **electronic signature is acceptable**.*

X

Name (PLEASE PRINT)  
Consortium Director

X

Signature  
Consortium Director